

CLAIMS

- [1] A coating material for forming a coating layer on a surface of a transparent film, the coating material comprising:
- 5 a thermosetting resin;
an inorganic filler; and
a mixed solvent that contains at least two solvents,
wherein a content of the thermosetting resin is in a range from 5 to 20 wt% with respect to a total amount of the thermosetting resin and the
10 inorganic filler, and
the mixed solvent contains cyclohexanone so that a content of the cyclohexanone is in a range from 25 to 35 wt% with respect to the entire mixed solvent.
- [2] The coating material according to claim 1, wherein the thermosetting
15 resin comprises a siloxane-based resin.
- [3] The coating material according to claim 1, wherein the thermosetting resin comprises alkoxysilane.
- [4] The coating material according to claim 1, wherein a total content of the thermosetting resin and the inorganic filler is 1 to 2 wt% with respect to a
20 total amount of the thermosetting resin, the inorganic filler, and the mixed solvent.
- [5] The coating material according to claim 1, wherein the inorganic filler comprises at least one of metal fine particles and metal oxide fine particles.
- [6] The coating material according to claim 1, wherein the transparent
25 film is a protective film of a polarizing plate.
- [7] The coating material according to claim 1, wherein the transparent film is a triacetylcellulose (TAC) film.
- [8] The coating material according to claim 7, wherein the triacetylcellulose (TAC) film is a triacetylcellulose (TAC) film that is not
30 saponified.

[9] A method for manufacturing an optical film that comprises a transparent film and a coating layer formed on a surface of the transparent film, the method comprising:

coating the surface of the transparent film with the coating material
5 according to claim 1 to form a coating; and
heat-treating the coating to obtain the coating layer.

[10] The method according to claim 9, wherein the coating layer has a thickness in a range from 50 to 500 nm.

[11] The method according to claim 9, wherein the transparent film is a
10 triacetylcellulose (TAC) film.

[12] The method according to claim 11, wherein the triacetylcellulose (TAC) film is a triacetylcellulose (TAC) film that is not saponified.

[13] The method according to claim 9, further comprising forming a hard coat layer on a surface of the coating layer.

15 [14] The method according to claim 13, further comprising forming a coat layer having a lower refractive index than the hard coat layer on a surface of the hard coat layer.

[15] An optical film comprising:
a transparent film; and
20 a coating layer formed on a surface of the transparent film,
wherein the optical film is obtained by the method according to claim 9.

[16] The optical film according to claim 15, wherein a hard coat layer is formed on a surface of the coating layer, and a coat layer having a lower
25 refractive index than the hard coat layer is formed on a surface of the hard coat layer.

[17] The optical film according to claim 16, which is used as an antireflection film.

[18] The optical film according to claim 15, which is used as a protective
30 film for protecting a polarizing film.

[19] A polarizing plate comprising a polarizing film and a protective film arranged on at least one surface of the polarizing film,

wherein the protective film is the optical film according to claim 15.

[20] An image display apparatus comprising at least one of the optical film
5 according to any one of claims 15 to 18 and the polarizing plate according to claim 19.